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INDUSTRY IN PISA IN THE EARLY FOURTEENTH CENTURY

SUMMARY

Pisa's commercial greatness and prosperity, 339. — Her decline at the end of the thirteenth century, 340. — Industrial organization in the early fourteenth century, 341. — Its mature form, 341. — The gilds, 341. — The unorganized crafts, 347. — The crafts, organized but dependent, 348. — Industrial regulation by the gilds, 349. — By the city, 350. — Study of the woolen industry, 353. — The *Curia Mercatorum*, 354. — The *Arte della Lana*, 355. — The domestic system in the shell of the old gild organization, 356. — Conclusion, 358.

Up to the present time, our knowledge of Italian economic history in the early Renaissance is slight. There are the studies of Poehlmann,¹ Doren,² and Davidsohn³ for Florence, of Broglio d'Anjano⁴ for Venice, and of Schaube⁵ for Pisa, but practically nothing of value besides. This is not due to the lack of available printed sources; for the printed *Statuti* of the Italian cities contain a mass of material which will amply repay investigation.⁶ As an example of what can be done from the printed sources I have made this study from the *Statuti* of Pisa,⁷ a contribution toward a fuller knowledge of the industrial side of Italian economic history.

¹ Poehlmann, R, *Die wirtschaftspolitik der florentiner renaissance und das princip der verkehrsfreiheit*.

² Doren, A, *Studien aus der florentiner wirtschaftsgeschichte*.

³ Davidsohn, R, *Geschichte von Florenz*.

⁴ Broglio d'Anjano, R, *Die Venetianische seidenindustrie und ihre organization bis zum Ausgang des mittelalters*.

⁵ Schaube, A, *Das Konsulat des Meeres in Pisa*.

⁶ The Library of Harvard University has recently acquired a large collection of Italian *Statuti*, numbering nearly four hundred volumes.

⁷ *Statuti Pisani*, edited by Francesco Bonaini in three volumes, Florence, 1854-70.

Pisa began her expansion before the first Crusade. In company with Genoa she had cleared the Tyrrhenian Sea of Saracens, and a victory over the Muslims in North Africa in 1087 opened the rich trade of North Africa. But in the next two decades came still greater expansion. The Pisans were pushing and ambitious. They used the Crusades early for their own commercial advantage. Their fleet, on which sailed the Archbishop of Pisa himself, the great Daibertus, was among the first to reach the Holy Land during the First Crusade. Only by its help was Jerusalem taken; and in return for this aid, the Pisans secured a quarter in Joppa, the port of Jerusalem. During the next five years, Pisan fleets aided in the conquest of many a city; the rewards were trading rights and quarters. The stately array of charters and grants of rights and quarters in Laodicea, Antioch, Tyre, Joppa, Jerusalem, Tripoli, and Acre,¹ made and constantly reaffirmed to her consuls throughout the twelfth century, show the extent of her commerce and power. Moreover she had favorable commercial treaties with the Greek Emperor¹ and the Kings of Busa² and Tunis,³ which opened Constantinople and the whole of North Africa to her merchants in the thirteenth century.

The proofs of her wealth remain to this day. The Cathedral, far away from the markets and shops and busy wharves, was begun in 1118, the great wall in 1142, and the Baptistry in 1153. Even Villani, Florentine tho he was, concedes her greatness and wealth. Under the date of 1282 he writes, "At this time there were more powerful and rich citizens in Pisa than in any other city in Italy. The Pisans were lords of

¹ For these charters see *Flaminio dal Borgo, Diplomi Pisani*, pp. 85 to 103 inclusive.

² *Ibid.*, p. 173.

³ *Ibid.*, p. 210.

⁴ *Ibid.*, p. 213.

Sardinia, of Corsica and of Elba, and their private revenues as well as those of the commune were immense. It may be said that their ships had command of the sea. In the town of Acre, they were most powerful, and were related to many of the rich burgers there."¹

By the beginning of the fourteenth century, Pisa had passed the zenith of her greatness. In 1284, Genoa defeated her in the battle of Meloria. Her fleet was destroyed, thousands of her citizens killed, and at least 9,272 taken prisoners to Genoa and kept there for years.² Close upon this defeat came civil war, a papal interdict, and an alliance of Genoa, Lucca and Florence against the city. Her commerce declined.³ Yet Italian cities have always shown a great power of recuperation, and Pisa is no exception.⁴ Twenty-six years after Meloria, when Henry VII announced his coming into Italy, the city sent to him the sum of 60,000 ducats from the city treasury, and promised a like sum when he should enter Italy.⁵ During Henry's campaign in Italy in 1312-13, Pisa was one of his chief allies and aids.⁶

During the centuries of the city's great commercial expansion and activity, there had gone on a development of industrial organization of which we know very little. It is not surprising, however, to find, in the late thirteenth and early fourteenth centuries, the organiza-

¹ Giovanni Villari, *Cronica*, vol. i, p. 416.

² Villari, *History of Florence*, vol. i, p. 280. The basis for these figures is the inscription on the church of St. Matteo at Genoa. At the end of Bonaini's first volume there is a fac-simile reproduction of this inscription in color.

³ Schaube, A., *Das Konsulat des Meeres in Pisa*, p. 52. He considers the decrease of the number of men in the greater council of the *Ordo Maris*, the important commercial maritime gild, from 76 in 1286 to 24 in 1300, a very strong proof of commercial decline.

⁴ For illustrations of the recuperative powers of the Italian cities, see the stories of the conflicts between Venice and Genoa in Horatio Brown, *Venice, an Historical Sketch*.

⁵ Albertinus Mussatus, in Muratori, *Rer. Ital. SS.*, vol. x, p. 334.

⁶ *Ibid.*, p. 411.

tion of industry in what may be called a mature form. Not only was the form of industrial organization mature, but this organization had become fossilized, so that any new development had to proceed under the shell of the old system. This happened, as will be shown presently, in the woolen industry.

The industry of the city was centered in the *Arte della Lane*, or Wool Gild, and the seven craft gilds which made up the *Septem Artes*.¹ The *Arte della Lane* and two gilds of merchants, the *Curia Mercatorum* and the *Ordo Maris*,² composed the *Tres Ordines*.

This division of the gilds into two groups we find in Florence also. The *Tres Ordines* of Pisa correspond to the seven greater gilds of Florence; and the *Septem Artes* of Pisa to the fourteen lesser Florentine gilds. The line of division is probably the distinction between the "popolo grasso" and the "popolo minuto" in each city. The seven craft gilds in Pisa were the gilds of the Smiths, the Skinners, the Shoemakers, the Tanners, the Butchers, the Vintners and the Notaries.

At the head of each gild, exercising a general oversight over the gild, were consuls or captains. They varied in number: in the Wool Gild there were three; the Butchers had six; and the Vintners four. Their election is interesting, in that it shows a clinging to the older forms of democracy, after the substance had gone, — an indication of the maturity of the organization. Sometime in December, the gildsmen assembled in a church, the Skinners, for instance, in the church of St. Laurentius, the Vintners in St. Lonardus, the Tanners

¹ This name is used in two senses: as a general name for the seven gilds, and as a specific name for the incorporated union of the gilds which was made in 1305.

² With these two gilds of merchants I shall not deal. The *Ordo Maris* has been carefully studied by Adolf Schaube in *Das Konsulat des Meeres in Pisa*, to which I have already referred. No study has been made of the *Curia Mercatorum*, which was composed of merchants trading by land.

in St. Michael in Burgo. The gildsmen, however, did not all take part in the election. They were merely present. As a good example, the method of election in the Butchers' Gild may be described.¹ The twelve councillors of the Consuls were joined by twelve "worthies,"² chosen by the consuls. To these twenty-four men, an equal number of ballots was given, eighteen of which were blank, and six contained the word "elector." The six electors thus created at once chose the new six consuls and announced the result to the assembled craft. The consular term was one year, from January first. One gild prescribed that the consuls must be at least thirty years of age.³ As a rule, either the consul or his father must have been born in Pisa, altho this deficiency could be overcome by a ten or twenty years' residence in the city, with the payment of dues and services to the city, and possessions worth at least £50.⁴ We often find rules intended to keep the consular office in the hands of the actual masters who worked with their own hands, or at least directed workmen.⁵ The candidate for the consulship must have exercised the craft at least ten years, "himself or his father," and he must have been exercising it continuously for the two years before the election. Such regulation represents an effort on the part of the actual workers to keep the control of the gild in their own hands. It would be necessary only in a late stage of organization, where the most powerful gildsmen had ceased to be industrial masters.

¹ I take the description from Bonaini, vol. iii, p. 1005. All references to Bonaini in the future will be merely by volume and page.

² "Bonos homines." In some of the gilds the councillors of the consul act alone, there being no addition of "bonos homines."

³ The Vintners, vol. iii, p. 1105.

⁴ Vol. ii, p. 46. For further matter on the election of consuls and their qualifications see, vol. ii, p. 46, vol. iii, p. 55, vol. iii, p. 873, vol. iii, p. 876, vol. iii, p. 915, vol. iii, p. 1022, vol. iii, p. 1058.

⁵ Vol. iii, p. 876, vol. iii, p. 932, vol. iii, p. 1180.

This happened in the London Livery Companies, where the trading masters finally gained control of the gild organization.

The consuls were assisted by a council; sometimes, as in the *Arte della Lane*, and probably in the *Smiths*, by a greater and a lesser council.¹ The consuls were paid a salary, but sometimes we find that they could not refuse to accept the office without paying a heavy fine.² There was also a *Camerarius*, who handled all the moneys of the gild. He was elected, and held office for a year. Some gilds had also a notary, a messenger, and a judge.

Each gild had its own court,³ presided over by the consuls in turn or by one of them,⁴ before which all cases involving gildsmen were tried. In the *Smith's* gild, one consul sitting alone could try cases up to 20 *solidi*; cases involving more had to be tried by all the consuls.⁵ No appeal could be taken from the gild court; its sentence was final.⁶ If a gildsman felt injured by his consuls, he could not summon them before the *Potesta* or captains of the city, but he might complain to the other consuls, or to the captains and priors of the corporation of the *Septem Artes*.⁷

The problem of admission to membership in the gild is important. Did the gildsmen admit new members

¹ The councils were either chosen by the consuls as in the *Smith's Gild*, or elected as in the *Vintner's Gild*.

² The *Vintners* paid £3, and a half of all fines in the gild court. The *Arte della Lane* paid £15, but imposed a penalty of £13 for refusal to serve. The *Smiths* paid 15 d. for each shop, and a half of all fines in the court.

The symbols £, s., and d. do not refer to English money, but the *livra*, *solidus* and *denarius* of the Italian money of account. Twelve *denarii* made one *solidus*, and twenty *solidi* a *livra*. The metal content of these coins is not certainly known, but it was probably smaller than that of the present English money.

³ Vol. iii, p. 957, vol. i, p. 89, vol. iii, p. 919.

⁴ Vol. iii, pp. 867, 870.

⁵ Vol. iii, p. 871.

⁶ Vol. iii, p. 871. See also vol. iii, p. 867, vol. iii, p. 676.

⁷ Vol. iii, p. 1179.

freely, or did they seek to maintain their privileges for themselves? Was their policy inclusive or exclusive?

In Northern Europe, the normal way to become a master gildsman was to serve as apprentice with some master for a specified time, learning the craft. The apprentice became a journeyman when his time of training had expired; and when he was able, he might open a shop of his own. In Pisa we find the usual system of apprenticeship. The term varied widely among the gilds. The Tanners of Spina required six years; the apprentice was to have 3 solidi a year, and was to furnish his own bread, wine, and bed.¹ The Skinners of the New Bridge required six years. Eight days' trial was allowed before the indenture was made. The master furnished food and drink. Before the apprentice could open a shop, he had to pay the gild 100 solidi.² The Tanners of St. Nicolas demanded an eight year term, paying two to six solidi per year.³ The term of the Shoemakers was three years,⁴ and of the Vintners five years.⁵ The Skinners forbade giving work to any boy younger than sixteen years,⁶ and required an apprenticeship of at least two years.⁷ There is no trace of the requirement of anything like a masterpiece.

Could admission to the gild, with the right to open a new shop, be obtained in any other way than by serving an apprenticeship? Most gilds made provision for this. First, in the case of citizens. In the Spina Tanners,⁸ membership could be inherited by sons, brothers, grandsons, and first cousins. The Butchers were liberal. All they required from a citizen was that he should take an oath to observe the Breve or gild charter, and to exer-

¹ Vol. iii, p. 964. The indenture had to be drawn up within 15 days.

² Vol. iii, p. 980, vol. iii, p. 987.

³ Vol. iii, p. 992.

⁴ Vol. iii, p. 1032. Fifteen days' trial was allowed.

⁵ Vol. iii, p. 1138.

⁷ Vol. iii, p. 1083.

⁶ Vol. iii, p. 1069.

⁸ Vol. iii, p. 964.

cise the craft without fraud.¹ The Wool Gild required from a citizen wishing to open a shop an oath to the gild, and the payment of forty solidi.² But in the case of strangers the requirements were more exacting. Ten livrae was generally required, with an additional bond of from twenty-five to fifty livrae, that the work should be honestly done.³ The Smiths demanded a payment to the gild of only twenty solidi, with a bond of twenty-five livrae.⁴ The Skinners' Gild, on the other hand, exacted a fee of fifteen to twenty-five livrae.⁵ The Skinners of the New Bridge absolutely excluded everyone from the mastership who had not served a six year apprenticeship.⁶ Strangers coming to the city might, however, be allowed to work for wages in the gild. Whether these various fees were prohibitive can best be seen from a study of wages. The shipwrights received three solidi to four solidi ten denarii per day. Finishers of leather (workmen in the Skinner's Gild) got five solidi six denarii a day, so that their fee of fifteen livrae would mean fifty-five days' pay. The fine of a lanaiuolo who refused the consulship was thirteen livrae. The Notary of the Tanners was paid three livrae per year, and of the Wool Gild eighteen livrae. On the whole, the requirements for admission to the gild mastership appear to be high, and the policy fairly exclusive, especially in the case of non-citizens.

The importance of the problem whether admission to gild-membership was easy or difficult at once becomes plain when we know that the guilds had political as well as industrial functions. Indeed, the political aspect may in some respects be regarded as the more important, for the guilds sometimes did not have a

¹ Vol. iii, p. 1013.

² Vol. iii, p. 668.

³ For example, the *Arte della Lana*, vol. iii, p. 668.

⁴ Vol. iii, p. 872.

⁵ Vol. iii, pp. 987 and 988.

⁶ Vol. iii, p. 1077.

monopoly of industry in their own particular crafts, while they may be said to have had a monopoly of political rights. Gildsmen exercised the franchise and membership in a gild was one of the few ways in which a man of the "popolo minuto" could have a voice in the city government. Under the commune, the guilds had no political power or official place in the city government. In 1188, however, it is to be observed that an oath of peace with Genoa is signed first by the twelve consuls of the City, and then by the Consuls of the Merchants and the Consules Artis Lane, before the signatures of the individual citizens.¹ This indicates that even thus early the Merchants and the Wool Gild were becoming influential in the state.

In 1254, a popular revolution, led by the "popolo grasso," overthrew the Commune, and set up a captain of the people beside the Potesta, while twelve "Anziani" or Ancients held the actual power in the city.² The council of the Anziani just after this Revolution, was made up of the consuls of the Ordo Maris, the consuls of the Ordo Mercatorum, and the consuls of the "Quattuor Artes." The four craft guilds which thus succeeded in gaining political power in 1254 were the Tanners, the Notaries, the Smiths, and the della Lane.³ When next we find mention made of the guilds, the Arte della Lane has ceased to be considered as one of the craft guilds and is counted with the Ordines, and four new craft guilds have been given political power. By 1277, the year of our document,⁴ the number of craft guilds with a place in the state was seven. This number

¹ Flam. del Borgo, *Diplomi Pisani*, p. 114.

² Schaube, *op. cit.*, p. 43. Muratori, *Rer. Ital. SS.*, vol. xxiv, pp. 644-645. A similar revolt took place in Florence four years earlier. Villari, *History of Florence*, vol. i, chap. 4.

³ Schaube, *ibid.*, p. 44.

⁴ Schaube, *op. cit.*, p. 44; Bonaini, vol. i, p. 53.

was never increased, and was definitely fixed at seven in the new constitution of the city in 1286.¹ New guilds had been organized; but the Captain of the city now swore "to compel all captains, councillors, and rectors of guilds and mysteries, except the *Tres Ordines* and the *Septem Artes* to surrender their charters." In the future "no other artificers, or men of any work, could have charters, or captains or consuls." Such fixing of the number of guilds is not uncommon. Loesch shows it occurred in Cologne,² Geering in Basel³ and Villari speaks of it in Florence, where it occurred seven years later than in Pisa. In Florence this may have been due in part to the jealousy of the *poletariat* by the "*popolo grasso*" and "*popolo minuto*"; for their power would have been diminished by the formation of new guilds among the lowest class. In Pisa, a careful study of classes and class struggles might reveal a similar cause. Of the twelve *Anziani*, four had to be chosen from among the *Septem Artes*; ⁴ the others were chosen from among the *Tres Ordines*. The *Anziani* were elected by an assembly which included the *Anziani* in office, their two councils, the consuls of the Wool Guild, the priors and captains of the seven guilds and some other groups.⁵ The individual gildsman has little or no direct part in all this process; but his gild has a very important place in the city government; and in this way we may say that he has the franchise and exercises political rights.

As has been already noted, all the industry of the city was not organized under the gild system, which was

¹ Vol. i, p. 631.

² Loesch, H. von, *Die Kölner Zunfturkunden*.

³ Geering, T., *Handel und Industrie der Stadt Basel*, pp. 25 ff.

⁴ Vol. i, p. 307. Not more than one *Anziano* was to be chosen from the same gild.

⁵ Vol. i, p. 573.

restricted to eight crafts, — those of the *Arte della Lana* and the seven gilds. Of the remaining crafts, some were entirely unorganized, and some had an organization dependent upon another body. Let us look first at the entirely unorganized crafts. Any person coming to the city of Pisa to live might exercise any unorganized craft freely, provided that he paid the obligations demanded by the city of its citizens: the “*data*” and the real and personal “*servitia*.”¹ In the years between 1313 and 1327, a reciprocity clause was introduced; no stranger, in whose city an exaction was made from a Pisan for exercising his craft there, could exercise his craft in Pisa unless he paid a similar exaction.²

Possibly to prevent an effort to organize and control certain crafts contrary to law, there were express statutes forbidding any interference with any citizen wishing to exercise these crafts. For example, no shipwright could forbid a citizen, or even a stranger, from building ships.³ In 1286,⁴ an attempt was even made to break down the exclusive monopoly over their craft of some of the seven gilds. Any citizen or countryman might sell meat in Pisa, provided that he swore before a judge to observe the regulations laid down for butchers. He was not, however, to be subject to the consuls of the Butchers unless he wished.⁵ Likewise, any citizen wishing to prepare hides might do so without contradiction.⁶

There still remain the crafts which, tho they had an organization of their own, were dependent upon another body. The Candlemakers, the Apothecaries, the Doc-

¹ Vol. i, p. 288, vol. ii, p. 254.

² Vol. ii, p. 251.

³ Vol. i, p. 306.

⁴ The date may have been earlier, but our first statute dates from that year. There is a gap in the *Brevia* from 1164 to 1286.

⁵ Vol. i, p. 311.

⁶ Vol. i, p. 306. This rule was, however, broken down in 1306.

tors, one group of Dyers, the Tailors, the Hatmakers, the Mirror-makers and the Turners had organizations of this description.¹ They had their own Brevia, and their own Rectors and Consuls, but were subject in all things to the Consuls of the Curia Mercatorum, to which they were attached, and to the rules of the Breve of the Curia. The Consuls of the Curia Mercatorum swear, on entering office, that they are ready to give to each association of merchants or artificers subject to him, a Breve drawn up in the Curia.²

The origin and exact nature of these groups is not clear. But Geering³ describes a similar situation in Basel. Here the craft guilds became political units, and in 1354 their number was fixed at fifteen. As new industries and new groups of workers developed, they were added to the older existing guilds, so that the guild of the Krämer, which corresponds in a rough way to the Pisan Curia Mercatorum, had under its jurisdiction no less than twenty groups of artisans. The development in Pisa may have been similar.

We come now to the question of the regulation of industry. In a craft which was organized as a guild, a great part of the regulation of that craft was in the hands of the guild itself, and was minutely provided for by the guild statutes. Fair dealing is enjoined upon guildsmen in their dealing with each other. One of the commonest rules is that no one of the guild shall enhance the rent of a guildsman's booth by offering more rent for it. And if the rent of a booth is increased by the owner, so that the guildsman vacates it, no other member of the guild may do any work of the craft there for three

¹ Vol. iii, pp. 29-33, vol. iii, p. 39, vol. ii, p. 42, vol. iii, p. 123, vol. iii, p. 125, vol. iii, p. 133, vol. iii, p. 136. In these pages their Brevia are given.

² Vol. iii, p. 42.

³ T. Geering, *op. cit.*, p. 42.

years.¹ In the Tanners' Gild we find rules such as this: that when a buyer comes to a tanner's shop, another tanner may not linger around to hear the said business.² There are a few regulations concerning the purchase of raw materials. The Smiths provide that coals must be bought from men of the gild; and if anyone buys coals on the Arno, — that is, as they are brought to the city, — he must divide them with any member of the gild who wants them, for the same price which he paid.³ Tanners were not to buy skins of any regrator.⁴

Occasionally, we see protection of home industry, as when the lanaiuoli, men of the Wool Gild, are forbidden to bring wool on a distaff, or combed in any way, from outside the city into Pisa.⁵ No tanner could buy any leather tanned outside the city;⁶ certain tanners swore not to tan any leather outside the city, nor take any apprentice who would not take a similar oath.⁷ The lanaiuoli were forbidden to open shops outside the city proper,⁸ and the export of certain thread was prohibited.⁹

But there was also regulation of industry by the city; and this regulation was extended not only over the crafts which were not organized as gilds, but the gilds as well. The regulation of unorganized crafts by the city offers some interesting features. Altho teachers are not strictly craftsmen, they seem to have been supervised in a manner analogous to the craft regulation. Agreements among "masters of the art of grammar,"¹⁰ for

¹ Vol. iii, p. 679, vol. iii, p. 946.

⁵ Vol. iii, p. 689.

² Vol. iii, p. 917, vol. iii, p. 956.

⁶ Vol. iii, p. 926.

³ Vol. iii, p. 865.

⁷ Vol. iii, p. 935.

⁴ Vol. iii, p. 917.

⁸ Vol. iii, p. 670.

⁹ Vol. ii, p. 230.

¹⁰ This statute is of date 1313-37, i.e. when Petrarch was very young, possibly before he had done anything at all to create interest in classical antiquity. It may be an indication of the beginning of the Renaissance in Italy.

putting up their prices higher than an appended scale,¹ were forbidden under the penalty of an enormous fine, and expulsion from the city. "In these deeds many of them are found to have been culpable, making agreement to the injury and detriment of the city." Moreover, no one of the said masters teaching scholars, should dare or presume to drink in any cellar of the city of Pisa, under penalty of forty solidi for each offence.² Farriers, shipwrights, barbers, bankers, and tile-makers were given regulations and maximum price-scales by the city. In the case of the farriers, there is an increase in the scale of about a third between 1286 and 1303.³ Laundrymen were not to wear their customers' clothes, and were compelled to make good any loss on the mere word of the customer.⁴ The shipwrights, if dissatisfied, had to submit their grievances to a disinterested board of arbitration.⁵ The barbers were not to shave or draw blood from any kind of leprous person.⁶ Bankers and money changers had to be natives of Pisa; they were under supervision, and to prevent loss to depositors, they had to deposit £500 to £5,000 with the city.⁷ Officials of the city, chosen in various ways, supervised these crafts.

Over the organized crafts, the guilds, as far as one may judge from the statutes, the city kept a firm hand. In 1286, all the Brevia of the Seven Guilds and the Arte della Lane were ordered to be handed in for correction and emendation within three days.⁸ This correction was to be done by wise men, chosen by the Anziani, and working under the supervision of the Anziani. Correction might be required by all Potestas and Cap-

¹ The teacher could charge forty solidi per year per pupil, and accept a present of five solidi more.

² Vol. ii, p. 287.

³ Vol. i, p. 461, vol. ii, p. 377, and other places.

⁴ Vol. i, p. 228.

⁸ Vol. i, p. 630, vol. i, p. 288.

⁵ Vol. i, p. 306.

⁶ Vol. i, p. 337.

⁷ Vol. i, p. 291.

tains of the city, within one month after their entry into office.¹ The Breve of the Smiths was corrected eleven times between 1279 and 1306; in the year 1298 alone, three times.² In this way the state secured publicity and exercised a very real control over the guilds. Moreover, each new Potesta of the city was bound to compel the heads of all the guilds to make the members of their guilds swear to observe their Brevia.³

Limitation of output, agreements in restraint of trade, or compulsion upon others to prevent their trading on as large a scale as possible, were strictly forbidden by the city.⁴ But in spite of this general prohibition, there are two entries in the Brevia of the Tanners, which seem to show a limitation of output by the guild. In one case it is forbidden to take more than sixteen hides from the tanning vat at one time;⁵ in another, only two hides of camels and "bufali" are to be taken at once.⁶ This, however, may have something to do with the technical processes of tanning.

A large part of the Brevia of the guilds is made up of regulations to insure honesty in weight, measure, and quality of the product, and these are constantly reinforced by city statutes. False cloths and adulterated saffron were confiscated. All wool and cotton sold had to be weighed by the public weigher.⁷ In measuring cloth, the standard measure of the Curia Mercatorum had to be used,⁷ and the cloth had to be measured in a prescribed manner. The balances of the smiths were inspected every six months by the Podesta of the city, accompanied by a master of the guild. If a balance was found to be false, the penalty was "for each ounce, one solidos."⁸ The measures of the vintners were inspected

¹ Vol. ii, p. 71.

² Vol. iii, p. 886.

³ Vol. iii, p. 866.

⁴ Vol. i, pp. 287 ff.

⁵ Vol. iii, p. 936.

⁶ Vol. iii, p. 942.

⁷ Vol. ii, p. 104.

⁸ Vol. iii, p. 871.

once a month by the consuls of the Vintners' Guild; here we have state supervision through consuls of a gild.¹ Regulation by the city was not concerned alone with weights, measures and quality. Public health and public policy also were considered. The butchers were given careful regulations in the interests of public health to prevent the selling of diseased meats, and to prevent the accumulation of refuse.² Vintners were to close their shops in times of riot; no gambling or gambling devices were allowed in their shops, and no young man or woman between the ages of seven and eighteen years might enter them.³

Information in considerable detail is available concerning the woolen industry. This had really outgrown the old gild organization, and developed a new system of industry within the shell of the older organization. It was divided between the *Curia Mercatorum*, and the *Arte della Lane*. The members of the *Curia Mercatorum*, the Merchants, were large importers of undyed, unfinished cloths of linen,⁴ of silk,⁵ and especially of wool,⁶ — “*panni franchisci de Ultramontes*.” Attached to the *Curia Mercatorum* were groups of shearers and finishers, who finished these foreign cloths, and of dyers, distinct from the dyers and shearers of the *Arte della Lane*. Undyed cloth was also brought to Pisa by strangers. Such unfinished cloths, brought by strangers, had to be announced to the consuls of the *Curia*, and the consuls swore to divide these among the shops and dyers of the city for dyeing, or to “cause a just part of the pence to be restored among the dyers from those for cloths of strangers.”⁷ This means apparently that if such cloths were not divided, the

¹ Vol. i, p. 422.

² Vol. i, p. 307.

³ Vol. i, p. 422.

⁴ Vol. iii, p. 17.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ Vol. iii, p. 128.

dyers who were injured would receive a compensation. On each piece of cloth brought by a stranger, the consuls of the Curia Mercatorum received 12d. from the captains of the dyers.¹ The home dyeing industry was jealously protected. Anyone, whether a citizen or a stranger, who carried cloth from Pisa to Lucca to be dyed, and brought this dyed cloth back to Pisa, paid forty solidi for each piece.²

Some cloth seems to have been woven by a group dependent on the Curia Mercatorum; especially "barracan," a waterproof woolen cloth, and linen and silk.³ The actual manufacture of cloth, however, was in the hands of the Arte della Lane, the Wool Gild. The Arte della Lane, as we know it, was probably formed by a union of the various groups engaged in the production of wool and cloth. There is a trace of such union in the fact that there must be three consuls; one chosen from the lanaiuoli, one from the stamaiuoli, and a third either from the lanaiuoli, the stamaiuoli or the shearers.⁴ Who the lanaiuoli and stamaiuoli were will appear presently. The Arte della Lane, as has already been noted, was originally a craft gild and passed from the group of the craft guilds to the commercial and capitalist "ordines" in the period between 1254 and 1277. Some of its members even became members of the Ordo Maris,⁵ while the union and community of interest between the three Ordines was always strong.⁶ We may safely accept 1277 as the date by which the Arte della Lane had become capitalistic; and while it outwardly maintained the gild forms, industry was really carried on under the domestic system.

¹ Vol. iii, p. 128.

² Vol. iii, p. 35.

³ Vol. iii, p. 50, vol. iii, p. 69, vol. iii, p. 601. The references are very scanty.

⁴ Vol. iii, p. 651.

⁵ Schaube, *op. cit.*, p. 45.

⁶ Vol. iii, p. 724.

The lanaiuoli stood at the head of the industry; they were the capitalist entrepreneurs. As late as 1305, there were some lanaiuoli who were not masters but were classed with workers who work for wages.¹ Other lanaiuoli seem to be engaged in the business of combing wool and selling combed wool,² while the lanaiuoli who were the entrepreneurs employed wool beaters, shearers of fleeces and wool combers in their own shops.³ This may indicate that the lanaiuoli were originally preparers of wool — one of the initial crafts. In some way they secured control of the other processes. If this be true there is an analogous situation in Strassburg; the wool beaters, the initial craft, secure control of the industry.⁴ The lanaiuoli were not the only masters of the gild, for we hear of the stamaiuoli and the shearers who might have consuls chosen from their number; but the lanaiuoli so completely dominated the gild that when a union of the *Ordo Maris*, the *Curia Mercatorum* and the *Arte della Lane* was made in 1305, the word lanaiuoli is used for the Wool Gild.⁵ All through the *Breve* of the *della Lane*, it is the lanaiuoli for whom the other groups work. The statutes do not make clear the place of the stamaiuoli. They are mentioned only three times as yarn makers. It may be that they made yarn and sold it to the lanaiuoli, while at the same time, the spinners came directly to the lanaiuoli; or it may be that they had taken over other functions than yarn-making, and were not differentiated from the lanaiuoli.

The lanaiuoli had shops, and in them they employed shearers of fleeces, wool beaters and wool combers.⁶ The wool thus prepared was given to the spinners to spin. The spinner must come to the shop of the lan-

¹ Vol. iii, p. 735.

² Vol. iii, p. 689.

³ Vol. iii, p. 680.

⁴ Schmoller, G., *Die Strassburger Tuch und Weberzunft*, pp. 418 ff.

⁵ Vol. iii, p. 688.

⁶ Vol. iii, p. 680.

aiuolus, and carry the wool to his own house to spin.¹ To spinners living in the city not more than twenty-five pounds of wool could be given at one time; to those outside the city, not more than fifty pounds, and more could not be given before the first was returned.²

The wool, spun into yarn, was returned to the master's shop, and the weaver came for it. The price to be paid to the weaver was agreed upon in the master's shop, when the weaver fetched the yarn. The weaver was to bring back the shearings with every piece of cloth; he was not to sell or pledge any yarn or shearings to any person, and he was held responsible for loss on the master's word.³ To protect the weavers, it was forbidden to any master to set up looms in his shop, or to weave cloth for others for pay; but the force of this was destroyed, in that the master was permitted to weave his own cloth.⁴ This is an indication that masters had looms in their shops. Just what was the condition of the weavers, we do not know, but there are several statutes which indicate that it was one of subordination. They were forbidden to make "any union or company which could be against the office of the consuls."⁵ For weaving cloth for pay, they were excluded from all other work of the gild, that is, they might never become masters.⁶ At the same time, they had workmen working for them in their homes.⁷ About these workmen we have only one bit of information: they could not depart from their master as long as they owed him money. Among the silk weavers of Lyons, we find an analogous situation; weavers working under the domestic system employed workmen, who were bound to them by a debt.⁸

¹ Vol. iii, p. 688.

⁴ Vol. iii, p. 707.

² Vol. iii, p. 688. See also vol. iii, p. 670.

⁵ Vol. iii, p. 703.

³ Vol. iii, p. 703.

⁶ Vol. iii, p. 707.

⁷ Vol. iii, p. 704.

⁸ Godart, J., *L'ouvrier en Soie*, Part I, pp. 136, 137 ff., 180 ff.

The statutes show that the evils of the domestic system were in existence. Prohibitions are constantly found against theft of the material and against the buying wool or cloth in any condition from anyone not a public master of the gild; and especially not from weavers.¹ The city government could be invoked to seize any person even suspected of having any stolen wool, yarn or cloth, and to compel the person to prove it was lawfully acquired.

When the cloth was returned by the weaver, it was sent to the fuller, to be fullled. To protect the fullers, it was ordered that no man could carry any cloth to the fulling mill except the fuller. He had to give surety to the gild (as did the dyer and sometimes the weaver) to protect the lanaiulus against loss. The maximum price was fixed at three solidi a piece for fulling. The fullers might not full any cloth, except for a public master of the gild, unless the consuls gave them permission,² nor might they have looms in their houses.²

Among the dyers, some owned their own vats, others rented them. We find expressions like the following: "dyers, who rent vats and do not work by means of capital." Such dyers rented their vats from other dyers; but "if no person places a vat at his disposal, he shall not place anything in a vat without permission of him, whose it is." The price to be paid for dyeing cloth was to be agreed upon between the dyer and the lanaiulus.³ They were forbidden to make cloth.

The cloth finishers worked in their own shops. They had workmen, who were forbidden to leave the em-

¹ Compare the English Statute of 1455, against theft by workers in the domestic system. Of course, the rule forbidding people to buy cloth from weavers may also have been intended to prevent the weavers from becoming independent masters; but the whole tenor of the statutes shows that theft of materials was the thing most guarded against.

² The ordinances for the fullers, vol. iii, pp. 707-711 incl.

³ Ordinances for the dyers, vol. iii, pp. 712-714.

ployers until these had been satisfied for the money which had been advanced. The workmen were expressly forbidden to receive cloth directly from a fuller — a check upon any production of cloth out of the hands of the masters.¹

The production of cloth was restricted, so far as we can judge from the statutes, to the public masters of the gild — the lanaiuoli, the stamaiuoli and the shearers. Every avenue of leakage seems to have been closed. Spinners could not spin, weavers weave, fullers full, except for masters. Fullers were forbidden to have looms in their houses, dyers were not to make cloth. In short, no man who worked for wages in the craft was to make cloth. Yet the very repetition of these prohibitions probably means that cloth was being made surreptitiously, and that the monopoly of the capitalist masters was being attacked.

In conclusion, two things should be emphasized. First, the organization of industry was in a mature form at the comparatively early period under consideration, parallel to and stimulated by the city's early commercial prosperity. Secondly, Pisa remained a commercial city; she was not preëminently a manufacturing center, like the cities of Southern Germany. Her main interests were commercial, and the craftsmen never gained the prominence and power of their brethren in the north. Hence checks were imposed on the guilds, and consequently the gild organization, tho mature, was arrested in its development. This arrested development is seen in several important particulars, which distinguish Pisan gild organization from that of the cities of Southern Germany, where development went on unchecked. The gild organization in Pisa is limited to a small number of crafts; and even in these, the

¹ Ordinances for the cloth finishers, vol. iii, pp. 715-717.

Zunftzwang, characteristic of the northern cities, did not exist universally. There were no heavy requirements for admission to the mastership, for those who had served the apprenticeship and for townsmen; no masterpiece being required and the fees being small. City control was exercised not only by direct city supervision over the processes of the craft, but probably just as effectively by the requirement that gild statutes be submitted for examination and correction. This not only insured city control over the gild ordinances, but gave them publicity, a great factor then as now.

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